

# WEST Search History

09/188 261  
5/03

DATE: Monday, May 05, 2003

Set Name Query  
side by side

Hit Count Set Name  
result set

*DB=DWPI; PLUR=YES; OP=OR*

L6	mineral adj1 oil and pour adj1 point near5 10	15	L6
L5	mineral oil and pp of less than 10 degree centrigrade	4142639	L5
L4	mineral and pp of less than 10 degree centrigrade	4099984	L4
L3	'9709935'	5	L3
L2	'19645603'	1	L2
L1	'DE19645603'	0	L1

END OF SEARCH HISTORY

**WEST****End of Result Set**☐ **Generate Collection** **Print**

L2: Entry 1 of 1

File: DWPI

May 7, 1998

DERWENT-ACC-NO: 1998-262437

DERWENT-WEEK: 200140

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TITLE: Co- and ter-polymers used as flow improvers for crude oils - based on alpha, beta-unsaturated compounds and alpha, beta-unsaturated di:carboxylic acid an:hydrides

INVENTOR: KRULL, M; NAGEL, W ; WILDFANG, R

PATENT-ASSIGNEE:

ASSIGNEE

CODE

CLARIANT GMBH

CLRN

PRIORITY-DATA: 1996DE-1045603 (November 6, 1996)

PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
DE 19645603 A1	May 7, 1998		017	C08F210/00
DE 59703738 G	July 12, 2001		000	C08F210/02
WO 9820056 A1	May 14, 1998	G	000	C08F210/02
ZA 9709935 A	November 25, 1998		035	C08F000/00
EP 937108 A1	August 25, 1999	G	000	C08F210/02
EP 937108 B1	June 6, 2001	G	000	C08F210/02

DESIGNATED-STATES: CA JP KR LT LV NO SI AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE BE DE ES FI FR GB IT NL SE BE DE FI FR GB NL SE

APPLICATION-DATA:

PUB-NO	APPL-DATE	APPL-NO	DESCRIPTOR
DE 19645603A1	November 6, 1996	1996DE-1045603	
DE 59703738G	October 28, 1997	1997DE-0503738	
DE 59703738G	October 28, 1997	1997EP-0948822	
DE 59703738G	October 28, 1997	1997WO-EP05946	
DE 59703738G		EP 937108	Based on
DE 59703738G		WO 9820056	Based on
WO 9820056A1	October 28, 1997	1997WO-EP05946	
ZA 9709935A	November 5, 1997	1997ZA-0009935	
EP 937108A1	October 28, 1997	1997EP-0948822	
EP 937108A1	October 28, 1997	1997WO-EP05946	
EP 937108A1		WO 9820056	Based on
EP 937108B1	October 28, 1997	1997EP-0948822	
EP 937108B1	October 28, 1997	1997WO-EP05946	
EP 937108B1		WO 9820056	Based on

INT-CL (IPC): C07 D 307/56; C08 F 0/00; C08 F 8/32; C08 F 210/00; C08 F 210/02; C08 F 222/00; C08 F 222/06; C08 F 222/36; C08 L 23/08; C08 L 23/36; C10 L 1/14; C10 L 1/18; C10 L 1/22; C10 M 149/02; C10 M 149/06; C10 M 157/04

ABSTRACTED-PUB-NO: DE 19645603A  
BASIC-ABSTRACT:

Co- and ter-polymers contain 60-99 mol.% bivalent structural units -CH<sub>2</sub>CH<sub>2</sub>- (A) and optionally -CH<sub>2</sub>C(R<sub>1</sub>)R<sub>2</sub>- (B), and 1-40 mol.% bivalent structural units (C) and optionally (D) and (E) (where R<sub>1</sub> and R<sub>2</sub> = H, or methyl; R<sub>2</sub> = H, COOR<sub>3</sub> or OOCR<sub>4</sub>; R<sub>3</sub> and R<sub>4</sub> = 1-12C alkyl, preferably methyl or ethyl; R<sub>5</sub> and R<sub>6</sub> = H or methyl; a, b = 0 or 1; a+b = 1; R<sub>7</sub> = 6-24C alkyl, group of formula (F) or (G); X = 2-4C alkylene; R = methyl or 6-22C alkyl; R<sub>11</sub> = 6-24C alkyl; Y = 2-4C alkylene; n = 1-100; R<sub>12</sub> = 1-30C alkyl, 5-12C cycloalkyl or 6-30C aryl; R<sub>13</sub> = H, 1-4C alkyl; R<sub>8</sub> and R<sub>9</sub> = NHR<sub>7</sub> or OR<sub>13</sub>). Production of the co- and ter-polymers is also claimed. Further claimed are paraffin-containing crude oils and crude oil products containing the above polymers.

USE - As flow improvers for paraffin-containing crude oils, especially for crude oil products (claimed).

ABSTRACTED-PUB-NO:

EP 937108B

EQUIVALENT-ABSTRACTS:

Co- and ter-polymers contain 60-99 mol.% bivalent structural units -CH<sub>2</sub>CH<sub>2</sub>- (A) and optionally -CH<sub>2</sub>C(R<sub>1</sub>)R<sub>2</sub>- (B), and 1-40 mol.% bivalent structural units (C) and optionally (D) and (E) (where R<sub>1</sub> and R<sub>2</sub> = H, or methyl; R<sub>2</sub> = H, COOR<sub>3</sub> or OOCR<sub>4</sub>; R<sub>3</sub> and R<sub>4</sub> = 1-12C alkyl, preferably methyl or ethyl; R<sub>5</sub> and R<sub>6</sub> = H or methyl; a, b = 0 or 1; a+b = 1; R<sub>7</sub> = 6-24C alkyl, group of formula (F) or (G); X = 2-4C alkylene; R = methyl or 6-22C alkyl; R<sub>11</sub> = 6-24C alkyl; Y = 2-4C alkylene; n = 1-100; R<sub>12</sub> = 1-30C alkyl, 5-12C cycloalkyl or 6-30C aryl; R<sub>13</sub> = H, 1-4C alkyl; R<sub>8</sub> and R<sub>9</sub> = NHR<sub>7</sub> or OR<sub>13</sub>). Production of the co- and ter-polymers is also claimed. Further claimed are paraffin-containing crude oils and crude oil products containing the above polymers.

USE - As flow improvers for paraffin-containing crude oils, especially for crude oil products (claimed).

CHOSEN-DRAWING: Dwg.0/0

TITLE-TERMS: CO TER POLYMER FLOW IMPROVE CRUDE OIL BASED ALPHA BETA UNSATURATED COMPOUND ALPHA BETA UNSATURATED DI CARBOXYLIC ACID

DERWENT-CLASS: A14 A17 A95 A97 H01

CPI-CODES: A04-D08; A04-D09; A04-F01; A04-F05; A04-F07; A04-G01A; A10-B01; A12-W02A; H01-E;

UNLINKED-DERWENT-REGISTRY-NUMBERS: 0326S; 0479S ; 0642S ; 0653S ; 0760S ; 0835S ; 0843S ; 1126S

ENHANCED-POLYMER-INDEXING:

Polymer Index [1.1] 018 ; D01 D11 D10 D50 D82 D83 D84 D85 D86 F34 ; H0226 ; H0237\*R ; P0975\*R P0964 F34 D01 D10 ; M9999 M2153\*R ; M9999 M2200 ; L9999 L2391 ; L9999 L2153\*R ; M9999 M2084 ; M9999 M2335 ; L9999 L2084 ; L9999 L2335 Polymer Index [1.2] 018 ; H0022 H0011 ; R00326 G0044 G0033 G0022 D01 D02 D12 D10 D51 D53 D58 D82 ; G0760\*R G0022 D01 D51 D53 E00 E00\*R D11 D10 D23 D22 D31 D75 D42 D59 D65 D84 D85 D86 F39 ; H0226 ; L9999 L2391 ; M9999 M2084 ; M9999 M2335 ; L9999 L2084 ; L9999 L2335 ; S9999 S1627 S1605 ; P1150 Polymer Index [1.3] 018 ; H0022 H0011 ; R00326 G0044 G0033 G0022 D01 D02 D12 D10 D51 D53 D58 D82 ; R00843 G0760 G0022 D01 D23 D22 D31 D42 D51

D53 D59 D65 D75 D84 F39 E00 E01 ; H0226 ; L9999 L2391 ; M9999 M2084 ; M9999 M2335 ;  
L9999 L2084 ; L9999 L2335 ; S9999 S1627 S1605 ; P1150 Polymer Index [1.4] 018 ;  
H0022 H0011 ; R00326 G0044 G0033 G0022 D01 D02 D12 D10 D51 D53 D58 D82 ; G0760\*R  
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; H0226 ; L9999 L2391 ; M9999 M2084 ; M9999 M2335 ; L9999 L2084 ; L9999 L2335 ;  
S9999 S1627 S1605 ; P1150 Polymer Index [1.5] 018 ; R00326 G0044 G0033 G0022 D01 D02  
D12 D10 D51 D53 D58 D82 ; G0760\*R G0022 D01 D51 D53 E00 E00\*R D11 D10 D23 D22 D31  
D75 D42 D59 D65 D84 D85 D86 F39 ; R00843 G0760 G0022 D01 D23 D22 D31 D42 D51 D53 D59  
D65 D75 D84 F39 E00 E01 ; G0760\*R G0022 D01 D51 D53 E00 E00\*R D11 D10 D12 D23 D22  
D31 D75 D42 D58 D65 D85 D86 D87 F39 ; G0022\*R D01 D51 D53 D11 D10 D12 D26 D58 D63  
D82 D83 D84 D85 D86 D87 D88 D89 D90 D91 D92 D93 F89 F41 ; R00835 G0566 G0022 D01 D11  
D10 D12 D51 D53 D58 D63 D84 F41 F89 ; R00642 G0340 G0339 G0260 G0022 D01 D11 D10 D12  
D26 D51 D53 D58 D63 D84 F41 F89 ; R01126 G0340 G0339 G0260 G0022 D01 D11 D10 D12 D26  
D51 D53 D58 D63 D85 F41 F89 ; R00479 G0384 G0339 G0260 G0022 D01 D11 D10 D12 D26 D51  
D53 D58 D63 D85 F41 F89 ; R00653 G0384 G0339 G0260 G0022 D01 D11 D10 D12 D26 D51 D53  
D58 D63 D86 F41 F89 ; H0226 ; L9999 L2391 ; M9999 M2084 ; M9999 M2335 ; L9999 L2084  
; L9999 L2335 ; S9999 S1627 S1605 ; H0033 H0011 ; P1150 ; P0088 Polymer Index [1.6]  
018 ; ND01 ; ND06 ; Q9999 Q9347 ; Q9999 Q8139 Q8093 ; B9999 B5094 B4977 B4740 ;  
B9999 B3678 B3554 ; B9999 B4751 B4740 Polymer Index [1.7] 018 ; H0226 Polymer Index  
[1.8] 018 ; R00760 G2028 D01 D11 D10 D19 D18 D31 D50 D60 D76 D87 F62 ; C999 C102  
C000 ; C999 C271 Polymer Index [1.9] 018 ; D01 D02 ; A999 A475

SECONDARY-ACC-NO:

CPI Secondary Accession Numbers: C1998-081540

**WEST****End of Result Set**

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L2: Entry 1 of 1

File: DWPI

May 7, 1998

DERWENT-ACC-NO: 1998-262437

DERWENT-WEEK: 200140

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TITLE: Co- and ter-polymers used as flow improvers for crude oils - based on alpha, beta-unsaturated compounds and alpha, beta-unsaturated di:carboxylic acid an:hydrides

INVENTOR: KRULL, M; NAGEL, W ; WILDFANG, R

PATENT-ASSIGNEE: CLARIANT GMBH (CLRN)

PRIORITY-DATA: 1996DE-1045603 (November 6, 1996)

## PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
DE 19645603 A1	May 7, 1998		017	C08F210/00
DE 59703738 G	July 12, 2001		000	C08F210/02
WO 9820056 A1	May 14, 1998	G	000	C08F210/02
ZA 9709935 A	November 25, 1998		035	C08F000/00
EP 937108 A1	August 25, 1999	G	000	C08F210/02
EP 937108 B1	June 6, 2001	G	000	C08F210/02

DESIGNATED-STATES: CA JP KR LT LV NO SI AT BE CH DE DK ES FI FR GB GR IE IT LU MC NL PT SE BE DE ES FI FR GB IT NL SE BE DE FI FR GB NL SE

## APPLICATION-DATA:

PUB-NO	APPL-DATE	APPL-NO	DESCRIPTOR
DE 19645603A1	November 6, 1996	1996DE-1045603	
DE 59703738G	October 28, 1997	1997DE-0503738	
DE 59703738G	October 28, 1997	1997EP-0948822	
DE 59703738G	October 28, 1997	1997WO-EP05946	
DE 59703738G		EP 937108	Based on
DE 59703738G		WO 9820056	Based on
WO 9820056A1	October 28, 1997	1997WO-EP05946	
ZA 9709935A	November 5, 1997	1997ZA-0009935	
EP 937108A1	October 28, 1997	1997EP-0948822	
EP 937108A1	October 28, 1997	1997WO-EP05946	
EP 937108A1		WO 9820056	Based on
EP 937108B1	October 28, 1997	1997EP-0948822	
EP 937108B1	October 28, 1997	1997WO-EP05946	
EP 937108B1		WO 9820056	Based on

INT-CL (IPC): C07 D 307/56; C08 F 0/00; C08 F 8/32; C08 F 210/00; C08 F 210/02; C08

F 222/00; C08 F 222/06; C08 F 222/36 ; C08 L 23/08; C08 L 23/36; C10 L 1/14; C10 L 1/18; C10 L 1/22; C10 M 149/02; C10 M 149/06; C10 M 157/04

ABSTRACTED-PUB-NO: DE 19645603A

BASIC-ABSTRACT:

Co- and ter-polymers contain 60-99 mol.% bivalent structural units -CH<sub>2</sub>CH<sub>2</sub>- (A) and optionally -CH<sub>2</sub>C(R<sub>1</sub>)R<sub>2</sub>- (B), and 1-40 mol.% bivalent structural units (C) and optionally (D) and (E) (where R<sub>1</sub> and R<sub>2</sub> = H, or methyl; R<sub>2</sub> = H, COOR<sub>3</sub> or OOCR<sub>4</sub>; R<sub>3</sub> and R<sub>4</sub> = 1-12C alkyl, preferably methyl or ethyl; R<sub>5</sub> and R<sub>6</sub> = H or methyl; a, b = 0 or 1; a+b = 1; R<sub>7</sub> = 6-24C alkyl, group of formula (F) or (G); X = 2-4C alkylene; R = methyl or 6-22C alkyl; R<sub>11</sub> = 6-24C alkyl; Y = 2-4C alkylene; n = 1-100; R<sub>12</sub> = 1-30C alkyl, 5-12C cycloalkyl or 6-30C aryl; R<sub>13</sub> = H, 1-4C alkyl; R<sub>8</sub> and R<sub>9</sub> = NHR<sub>7</sub> or OR<sub>13</sub>). Production of the co- and ter-polymers is also claimed. Further claimed are paraffin-containing crude oils and crude oil products containing the above polymers.

USE - As flow improvers for paraffin-containing crude oils, especially for crude oil products (claimed).

ABSTRACTED-PUB-NO: EP 937108B

EQUIVALENT-ABSTRACTS:

Co- and ter-polymers contain 60-99 mol.% bivalent structural units -CH<sub>2</sub>CH<sub>2</sub>- (A) and optionally -CH<sub>2</sub>C(R<sub>1</sub>)R<sub>2</sub>- (B), and 1-40 mol.% bivalent structural units (C) and optionally (D) and (E) (where R<sub>1</sub> and R<sub>2</sub> = H, or methyl; R<sub>2</sub> = H, COOR<sub>3</sub> or OOCR<sub>4</sub>; R<sub>3</sub> and R<sub>4</sub> = 1-12C alkyl, preferably methyl or ethyl; R<sub>5</sub> and R<sub>6</sub> = H or methyl; a, b = 0 or 1; a+b = 1; R<sub>7</sub> = 6-24C alkyl, group of formula (F) or (G); X = 2-4C alkylene; R = methyl or 6-22C alkyl; R<sub>11</sub> = 6-24C alkyl; Y = 2-4C alkylene; n = 1-100; R<sub>12</sub> = 1-30C alkyl, 5-12C cycloalkyl or 6-30C aryl; R<sub>13</sub> = H, 1-4C alkyl; R<sub>8</sub> and R<sub>9</sub> = NHR<sub>7</sub> or OR<sub>13</sub>). Production of the co- and ter-polymers is also claimed. Further claimed are paraffin-containing crude oils and crude oil products containing the above polymers.

USE - As flow improvers for paraffin-containing crude oils, especially for crude oil products (claimed).

CHOSEN-DRAWING: Dwg.0/0

DERWENT-CLASS: A14 A17 A95 A97 H01

CPI-CODES: A04-D08; A04-D09; A04-F01; A04-F05; A04-F07; A04-G01A; A10-B01; A12-W02A; H01-E;

**WEST**

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L6: Entry 1 of 15

File: DWPI

Oct 22, 2002

DERWENT-ACC-NO: 2003-038727  
DERWENT-WEEK: 200303  
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TITLE: Base oil production, such as streams with wide boiling range, e.g. diesel feed, involves contacting base oil feed having preset pour-cloud spread with solid sorbent to produce oil with reduced haze and pour-cloud spread

INVENTOR: BISCARDI, J A; HOWELL, R L ; KRISHNA, K R ; PARIMI, K ; ROSENBAUM, J M ; YENNI, N L

PATENT-ASSIGNEE: CHEVRON USA INC (CALI)

PRIORITY-DATA: 2000US-0590441 (June 9, 2000), 1999US-0330339 (June 11, 1999), 2000US-0483305 (January 14, 2000)

## PATENT-FAMILY:

PUB-NO	PUB-DATE	LANGUAGE	PAGES	MAIN-IPC
US 6468418 B1	October 22, 2002		012	C10G025/00

## APPLICATION-DATA:

PUB-NO	APPL-DATE	APPL-NO	DESCRIPTOR
US 6468418B1	June 11, 1999	1999US-0330339	CIP of
US 6468418B1	January 14, 2000	2000US-0483305	CIP of
US 6468418B1	June 9, 2000	2000US-0590441	

INT-CL (IPC): B01 J 8/02; C10 G 25/00

RELATED-ACC-NO: 2001-061866

ABSTRACTED-PUB-NO: US 6468418B

## BASIC-ABSTRACT:

NOVELTY - Base oil having a pour-cloud spread of 10 deg. C or more is produced by contacting with a solid sorbent for a time and at conditions sufficient to produce a dehazed base oil having a reduced cloud point relative to that of the base oil feed. The base oil feed has a pour-cloud spread reduced by at least 5% relative to the untreated base oil feed.

DETAILED DESCRIPTION - Base oil having a cloud point and a pour point defining a pour-cloud spread of 10 deg. C or more is contacted with a solid sorbent for a time and at conditions sufficient to produce a dehazed improved base oil having a reduced cloud point relative to that of the base oil feed. The tendency of the treated base oil to form a haze after standing at ambient temperatures is reduced. The base oil feed produced has a pour-cloud spread reduced by at least 5% relative to the untreated base oil feed.

USE - For treating streams characterized by a wide range of boiling points such as diesel feed, waxy middle distillate, lube oils, gas oils, vacuum gas oils and white oils, bright stock, synthetic oil, heavy vacuum gas oils and heavy neutral base oils

obtained from mineral oil refining process or Fischer Tropsch process.

ADVANTAGE - Contact of the base oil feed with solid adsorbent significantly removes the haze precursor thereby reducing haze forming tendency of the base oil feed. The method enables reduction of cloud point of the base oil feed with little or no effect on the yield of the lube base oil. A base oil with improved clarity and reduced turbidity is obtained. A lube base stock recovered from the sorption has significantly reduced cloud point relative to the cloud point of the untreated base oil feed.

DESCRIPTION OF DRAWING(S) - The figure shows the change in the cloud point of a lube base oil product from the sorption process, as the function of the time on stream.

ABSTRACTED-PUB-NO: US 6468418B

EQUIVALENT-ABSTRACTS:

CHOSEN-DRAWING: Dwg.1/4

DERWENT-CLASS: H02 H06 H07

CPI-CODES: H02-B01; H06-B04; H07-A;





## Drafts

BRS:

Pending

## Active

- 09/788 261  
5/03
- L1: (1) 5718821.pn.
  - L2: (1) 5767190.pn.
  - L3: (1) 5789510.pn.
  - L4: (1) 5998530.pn.
  - L5: (1) 6010989.pn.
  - L6: (1) 6509424.pn.
  - L7: (0) 6565616.pn.
  - L8: (0) 6565616.pn.
  - L9: (1) 6468418.pn.
  - L10: (1) 5254652.pn.
  - L11: (1) 5205839.pn.
  - L12: (1) 5200484.pn.
  - L13: (495887) mineral adj1 oil and cloud adj1 point and boiling
  - L14: (495887) mineral adj1 oil and cloud adj1 point and boiling
  - L15: (0) mineral adj1 oil and cloud adj1 point and boiling adj1
  - L16: (1) mineral adj1 oil and cloud adj1 point and boiling adj1
  - L17: (33) mineral adj1 oil and cloud adj1 point and boiling adj1
  - L18: (0) mineral adj1 oil and cloud adj1 point and boiling adj1
  - L19: (33) mineral adj1 oil and cloud adj1 point and boiling adj1
  - L20: (230184) mineral adj1 oil and cloud adj1 point and boiling
  - L21: (30) mineral adj1 oil and cloud adj1 point and boiling adj1
  - L22: (30) mineral adj1 oil and cloud adj1 point and boiling adj1**

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DBs: USPAT:U: Plurals

Default operator: ☐ ☒ Highlight all hit terms initially

mineral adj1 oil and  
cloud adj1 point and  
boiling adj1 range and  
distillation and cold  
adj1 filter adj1  
plugging adj1 point and  
pour adj1 point and flow  
and ethylene with  
copolymer\$1

BRS form

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